

Louisville and Jefferson County Metropolitan Sewer District 700 West Liberty Street Louisville Kentucky 40203-1911 502-540-6000 www.msdlouky.org

February 1, 2008

502 6970

Mr. Femi Akindele Remedial Project Manager Kentucky/Tennessee Section U.S. Environmental Protection Agency Region IV 61 Forsyth Street Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 08, Fourth Quarter (FY08-2Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele:

In accordance with paragraph 11, under <u>Reporting Requirements</u>, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, <u>Air Quality Monitoring</u>, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on January 30, 2008.

- 1. URS Corporation letters dated January 28, 2008, 2 pages.
- 2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1page.
- 3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: November 5, 2007, 1 page.
- 4. Table 2, On-Site Meteorological Data, Sampling date, November 5, 2007, 1 page.
- 5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date November 5, 2007, 1 page.





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Please advise if you have any questions concerning the attached information.

Sincerely

Richard H. Watkins, Sr. Infrastructure Liaison

RHW/rw Lees-08-2Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet Mr. Ken C. Logsdon, Division of Waste Management

H. J. Schardein, Executive Director

Michael Griffith Lees Lane File



URS Corporation 1600 Perimeter Park Drive Morrisville, North Carolina 27560 Telephone: 919.461.1100

Fax: 919.461.1415

31825450.00002

January 28, 2008

Mr. Rick Watkins Louisville Metropolitan Sewer District 3050 Commerce Center Place Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on November 5, 2007(Quarter 42). All six ambient samples, along with all six (G1, G2, G3, G4, G5R, G5L) well samples and a Field Blank were taken on November 5, 2007.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Ambient air samples indicate no vinyl chloride, an improvement on the last sampling period. Almost all samples of methylene chloride, xylenes, benzene, and toluene remained within 0.07 ppb of last quarter's levels. Carbon tetrachloride was lower than the spring samples, except in one on-site sample where it was slightly higher (0.082 ppb). Concentrations of other analytes do not seem to be significantly different from previous samples.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate at the beginning of sampling, (60-68° F) with wind speeds ranging from 7.0 mph to 15.0 mph during the sampling day. However, a thunderstorm began at about 3:30 pm, with heavy downpour that cut sampling time short. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 3.5-hour collection period due to the storm.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total non-methane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.



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The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The November 5, 2007 field blank canister reported no positive hits other than the surrogate recoveries except a methane reading of 5 ppmv. The reported results have not been blank corrected in attached tables per our standard project procedure.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. Gas monitoring well G-1 was screened with a GA-90 analyzer to test for the presence of methane prior to field sample collection. Methane was detected with the instrument in the west side (right-hand) well head. Levels seem to be similar to or lower than the last sampling effort.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux Project Manager

Enclosure

cc:

Lauren Popoli, URS/LOU

Project File/Task 42

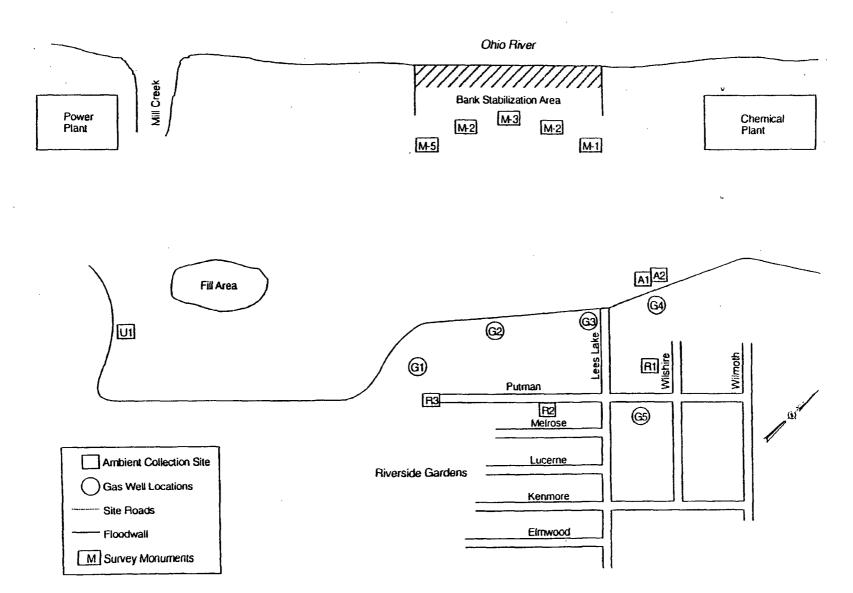


Figure 1. Lees Lane Landfill Sampling Locations

TABLE 1

TO-15 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 5 November 2007

	Ambient Air Samples							
Sample ID	U1	A1	A2	R1	R2	R3		
Canister ID	RA2031	RA2034	RA2025	HL0941	HL2093	RA2104		
Dilution Factor	3.1204	2.9232	3.209	4.3037	3.892	2.6859		
Location	LG&E	ONSITE	ONSITE DUP.	4423 WILSHIRE	PUTNAM LANE	PUTNAM END		
Veriflow ID	RA2031	RA2034	RA2025	HL0941	RA2035	RA2104		
Compound (ppbV)								
Benzene	0.175	0.179	0.187	0.182	0.191	0.162		
Methylene chloride	0.088	ND	0.168	ND	ND	0.029		
Toluene	0.256	0.144	0.377	0.222	0.224	0.251		
Vinyl chloride	ND	ND	ND	ND	ND	ND		
Xylene (Total)	0.030	ND	0.088	ND	ND_	0.0607		
Methane (ppmV)	5.40	5.40	5.51	6.37	6.07	6.30		

ND = Non Detect

TABLE 2

LOCAL METEOROLOGICAL DATA AMBIENT AIR SAMPLES SAMPLING DATE: 5 November 2007

	Barometric			Wind	Wind	
	Pressure	Temperature	Dewpoint	Direction	Speed	
Time '	(in Hg)	·(°F)_	(°F)	(from)	(mph)	Observation
8:00 AM	29.93	49	27	S	7	CLOUDY
9:00 AM	29.93	3	29	S	9	PTSUNNY
10:00 AM	29.9	56	34	S	8	PTSUNNY
11:00 AM	29.87	60_	42	SW	15	MOSUNNY
12:00 PM	29.84	63	46	SW	12	PTSUNNY
1:00 PM	29.81	65	49	SW	14	CLOUDY
2:00 PM	29.75	67	51	SW	12	CLOUDY
3:00 PM	29.73	68	53	SW	12	CLOUDY
4:00 PM	29.74	62	57	8	9	TSTM
5:00 PM	29.76	62	58	W	9	HVY RAIN
6:00 PM	29.77	61	57	V	8	MOCLOUDY

Source: National Weather Service, Louisville, Ky.

TABLE 3

TO-15 DATA SUMMARY FOR GAS MONITORING GAS WELL SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: November 05 2007

	Well Samples							
Sample ID	G1	G2	G3	G4	G5-L	G5-R	BLANK #1	
Canister ID	RA2029	RA2088	RA2028	RA2073	RA2067	RA2071	RA0898	
Dilution Factor	5.8404	2.6882	2.6859	2.7384	2.7025	2.6498	2.6667	
Orifice	RA2029	RA2036	RA2028	RA2073	RA2067	RA2071	NA	
Sampling Date	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	
Compound (ppbV)								
Benzene	5.4	ND	ND	ND	0.0622	ND	0.134	
Methylene chloride	ND	2.48	ND	ND	ND	ND	ND	
Toluene	ND	0.0425	0.0908	0.0444	0.177	0.0848	0.0837	
Vinyl chloride	0.73	ND	ND	ND	0.455	ND	ND	
Xylene (Total)	0.178	ND	ND	ND	0.222	ND	ND	
Methane (ppmV)	7,150	2.48	2.54	2.62	3.73	2.42	5.00	

ND = Non-Detect

^{* =} Dilution Factor for G1 Methane = 178,7566